

# ARIZONA STATE PRIORITY PLAN

Forest Land  
Enhancement  
Program

Forest  
Stewardship  
Program



**ARIZONA STATE LAND DEPARTMENT**  
**ARIZONA FOREST STEWARDSHIP COMMITTEE**  
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## **PROGRAM BACKGROUND, PURPOSE AND SCOPE**

### **Program Background**

Cooperative Forestry Assistance programs, implemented by State Foresters under the auspices of the USDA-Forest Service, have been in existence for over eighty (80) years. They were originally established by the Clarke-McNary Act of 1924 and later amended by the Cooperative Forestry Assistance Act of 1978. These programs provide educational, technical and financial assistance to private landowners and communities in the management and protection of their forest resources.

The Forest Stewardship Program (FSP) is a technical assistance program that was established ***"...to encourage the long-term stewardship of nonindustrial private forest lands by assisting owners of such lands to more actively manage their forest and related resources..."***. Section 5 of the Cooperative Forestry Act (16 U.S.C. 2103a) authorized the Forest Stewardship Program as part of a new charter for Cooperative Forestry Assistance.

The Forest Land Enhancement Program (FLEP) was authorized by Section 4 of the Cooperative Forestry Assistance Act (16 U.S.C. 2101, et seq.), as amended by Title VIII of the Farm Security and Rural Investment Act of 2002 (Pub. L. 107-171), and was established ***to provide additional financial assistance to State Foresters to encourage the long-term sustainability of non-industrial private forest lands (NIPF).***

### **Program Purpose and Scope**

The intent of the 101st Congress was that the Forest Stewardship Program would take a more holistic approach to forest management than technical assistance programs had in the past. This intent was manifested by a shift in emphasis from commodity production to ecology and conservation. The use of such language in the enabling legislation as ***"...protecting, maintaining, enhancing, restoring, and preserving forest lands and the multiple values and uses that depend on such lands..."*** clearly stated the call for greater environmental conscience in the management, use, and protection of our forest resources. Non-commodity considerations such as forest health; soils, forage, and water quality; recreation and esthetics; and wildlife and fish habitat are key elements of the program. These considerations dovetail with continued recognition of the importance of timber, wood products, and forest-based socioeconomics.

In establishing the Forest Land Enhancement Program, Congress stipulated that ***"...resource management expertise, educational, and financial assistance provided under the Program shall complement rather than replace or duplicate any existing state and/or federal programs providing assistance to NIPF owners."*** Thus, the FLEP was designed to *augment* existing programs such as Forest Stewardship. Additionally, Congress mandated that ***"...activities and practices funded under this program shall be designed to provide multiple resource benefits."*** The FLEP will be integrated with the FSP to manage NIPF to be more sustainable, both ecologically and economically.

**The mission of Arizona's Forest Land Enhancement and Forest Stewardship Programs is to assist private, <sup>1</sup>State Trust, and tribal forest land managers to more actively manage their forest lands and related resources: to keep these lands in a productive and healthy condition for present and future owners; and to increase the social, economic, and environmental benefits provided by these lands.**

## **ARIZONA'S FOREST RESOURCES**

### **Baseline Data**

Forests cover more than a quarter of Arizona's total land area (see **Maps–Appendix G**). By way of comparison, the State's 19.9 million acres of forest is second only to Colorado in the Southern Rocky Mountain States. In addition, only Idaho and Montana in the Northern Rockies have more forested area (Green and Van Hooser 1983).

Arizona's Forest can be divided into four major categories: timberland, woodland, riparian forest land, and windbreaks. Only non-reserved forest land will be considered eligible for the Stewardship Program.

Timberland includes the ponderosa pine, Douglas-fir, spruce-fir, mixed conifer, and aspen cover types. The timberland ranges primarily along the Mogollon Rim in a continuous band over 25 miles wide and more than 200 miles long, extending into New Mexico at the southeast end. Other concentrations of timberland are found on the high plateaus adjacent to the Grand Canyon in northwestern Arizona; on the Defiance Plateau and in the Chuska Mountains in the northeast corner of the state; and in the scattered mountain ranges of southeastern Arizona. Timberland can be found between 5,000 feet and 12,000 feet in elevation. NIPF ownership in the timberland category includes 26,548 acres of state trust land; 1,260,162 acres of Indian reservation trust land; and 56,914 acres of other private land; for a total of 1,343,624 acres.

Woodland includes pinyon pine-juniper, juniper, mesquite, and oak cover types. The pinyon pine-juniper and juniper cover types are found scattered throughout the northern half of the state between 3,000 and 6,500 feet in elevation. The mesquite and oak cover types are found primarily in the southeastern 1/4 of the state between 1,000 feet and 4,000 feet in elevation. NIPF ownership in the woodland category includes 1,178,225 acres of the state trust land; 4,983,994 acres of Indian Reservation trust land ; and 1,899,970 acres of other private land; for a total of 8,062,189 acres (see **Table 1–Appendix F**).

Riparian forest land is defined as "aquatic or terrestrial forest ecosystems that are associated with bodies of water such as streams, lakes, or wetlands, or are dependant on the existence of perennial or ephemeral surface or subsurface water drainage. Distribution, acreage, and ownership patterns are largely unknown at this time. However, we do know that riparian forest land is widespread in association with both perennial and ephemeral waterways, and that it is extremely important in our arid state. Efforts have begun to inventory this forest land, with the Arizona Game and Fish Department (AGFD) as the responsible agency.

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<sup>1</sup> FLEP funding will not be used to offset the cost of treatment on State Trust lands.

Windbreaks are the least extensive category of NIPF. They are widely distributed throughout the more open parts of the state where agricultural land use predominates. In addition, they are employed as living snow fences at high elevation in the northern part of the state. The majority of this category is found on "other private land" with a lesser amount on Indian reservation trust land and very little on state trust land. The total acreage in this category is unknown.

### **Eligible Lands**

The Forest Land Enhancement and Forest Stewardship Programs are applicable to all lands which meet the following criteria:

- \* They must be non-industrial private forest land (NIPF). NIPF is lands with existing tree cover and other lands including crop land, pasture land, surface-mined lands, and non-stocked forest lands that are scheduled for conversion to tree cover.

#### **NIPF Clarifications:**

- \* "...lands with existing tree cover..." are defined as lands stocked with at least 10% tree cover of any size (At maturity, the trees must be *"tree form"* which is defined as greater than eight (8) feet in height).
- \* The minimum area for classification as NIPF is ten (10) acres, owned by an individual or by an organized group of individuals. Strips of trees must have a crown width of at least 120 feet except for windbreaks, which must have a crown width of at least 60 feet at maturity. **There is no minimum width requirement for riparian forest land.**
- \* Unimproved roads and trails, streams, and clearings in forest areas are classified as NIPF if less than 120 feet wide.
- \* "...other lands including crop land, pasture land, surface-mined lands, and non-stocked forest lands that are scheduled for conversion to tree cover." are eligible only if the trees that are naturally regenerated or planted are capable of survival *without* supplemental irrigation *once they are established*. ***Established is defined as three years after they are planted.***
- \* They must be owned by an eligible landowner. An eligible landowner is any individual, joint operation, group, association, corporation, American Indian tribe or other Native American group, or other private legal entity, and each individual member of those organizations.

## **Conditions That Threaten Forest Resources**

The forest resources of Arizona are threatened by forest insects and diseases, invasive species, non-biotic factors (i.e., weather) urbanization stresses, and wildland fire. The potential for damage from these agents is directly related to the general well-being of our forest ecosystems.

Forest ecosystem health is a function of many complex and interacting factors, both natural and unnatural. Degradation of forest ecosystem health has been caused by urban sprawl, excessive grazing by domestic livestock, poor timber harvest practices, increased vehicular access, and suppression of wildland fires. In particular, effective fire suppression has disrupted the role of natural fire in our forest ecosystems. The result is that our forests have become more dense and overcrowded with unnatural and offsite species distribution, and are more susceptible to catastrophic damage by insects, diseases, and wildland fire.

There are many different forest insects and diseases that currently threaten Arizona's forest resources.

The most significant forest insects include bark beetles [*roundheaded pine beetle* (*Dendroctonus adjunctus*), *western pine beetle* (*D. brevicornis*), *larger Mexican pine beetle* (*D. approximatus*), *red turpentine beetle* (*D. valens*), and *pine engraver beetle* (*Ips* spp.) in the *ponderosa pine* cover type; *Douglas-fir beetle* (*Dendroctonus pseudotsugae*), *fir engraver beetle* (*Scolytus ventralis*), and *spruce beetle* (*Dendroctonus rufipennis*) in the *mixed conifer and spruce* cover types]; defoliators [*Prescott scale* (*Matsucoccus vexillorum*) in the *ponderosa pine* cover type; *pinyon needle scale* (*M. acalyptus*) in the *pinyon pine/juniper* cover type; *western spruce budworm* (*Choristoneura occidentalis*) and *Douglas-fir tussock moth* (*Orgyia pseudotsugata*) in the *mixed conifer and spruce* cover types; and *western tent caterpillars* (*Malacosoma californicum*) in the *aspen* cover type]; and twig-damaging insects [*twig beetles* (*Pityophthorus* spp.) in the *ponderosa pine* and *pinyon pine/juniper* cover types; and *pinyon tip moth* (*Dioryctria albovittella*) and *juniper beetles* (*Phloeosinus* spp.) in the *pinyon pine/juniper* cover type].

Diseases of primary importance include dwarf mistletoes [(*Arceuthobium* spp.) in the *ponderosa pine* and *mixed-conifer* cover types]; true mistletoes [(*Phoradendron* spp.) in the *pinyon pine/juniper* and *riparian hardwood* cover types]; root diseases [(*Armillariella* spp.) and (*Annosus* spp.) in the *ponderosa pine* and *mixed-conifer* cover types]; stem and branch diseases [*limb rust* (*Peridermium filamentosum*) in the *ponderosa pine* cover type, *stem cankers* (*Cenangium singulare*, *Ceratocystis fimbriata*, *Cytospora chrysosperma*, *Hypoxylon mammatum*, and *Cryptosphaeria populina*) in the *aspen* cover type, and *trunk & heart rots* in the *ponderosa pine* (*Dichomitus squalens*, *Phellinus pini*), *mixed-conifer*, and *spruce* cover types (*Phellinus pini*, *Echinodontium tinctorium*)], and foliage diseases [*black leaf spot* (*Marssonina populi*) in the *aspen* cover type].

Invasive exotic plants, also known as non-native or introduced species, are plants that have been introduced—either intentionally or by accident—into areas outside their natural ranges. Within their natural range, most species are kept in check by the powerful forces of competition and natural mortality agents (i.e., insects and diseases). Once moved to new regions, however, species may be freed from their normal biological and physical

constraints and spread unfettered. When this happens, native species are displaced<sup>2</sup> and ecosystems are disrupted<sup>3</sup>.

Often referred to as noxious weeds<sup>4</sup>, the best-known exotic plants in Arizona include tamarisk or salt cedar (*Tamarix spp.*), cheatgrass (*Bromus tectorum*), various thistles including yellowstar (*Centaurea solstitialis*), Scotch (*Onopordum acanthium*), bull (*Cirsium vulgare*), Canada (*Cirsium arvense*), and musk (*Carduus natans*), the knapweeds—diffuse (*Centaurea diffusa*), Russian (*Acroptilon repens*), and spotted (*Centaurea maculosa*), leafy spurge (*Euphorbia excula*), purple loosestrife (*Lythrum salicaria*), and camelthorn (*Alhagi pseudoalhagi*). Also well-known, but less damaging, are two species of toadflax – yellow (*Linaria vulgaris*) and dalmation (*Linaria genistifolia*),

Noxious weeds pose their greatest threat in areas where disturbance has exposed a bare mineral seed bed. Whether this disturbance is initiated by nature (e.g., floods, landslides, naturally-ignited wildfires, insect & disease infestations, or habitat degradation by wildlife,) or by humans (e.g., road-building, land clearing, harvest operations, domestic overgrazing or human-ignited fires) makes no difference to the weeds. Either way, the result is the same. Once established in areas like these, noxious weeds compete intensely with native plants, oftentimes replacing them altogether. Consequently, the potential for problems with noxious weeds in treated forest areas is significant. Non-biotic factors (i.e., weather) also threaten our forest ecosystems. Moisture stress resulting from severe multi-year drought is a key contributor to current forest health conditions, the likes of which haven't been seen since the 1950s. Drought-induced bark beetle activity is causing extensive tree mortality and increasing the risk of catastrophic fire on a landscape scale. Frost damage, hail damage, and breakage resulting from heavy, wet snows in overcrowded forests increase vulnerability to forest insects and diseases. In addition, flooding during heavy spring runoff may cause damage to riparian forest land. Salt damage from winter road maintenance along highways is an abiotic factor which negatively impacts forest health above 5,000 feet in elevation. Urbanization stresses are exacerbating the unhealthy condition of Arizona's forests. The population of Arizona is on the rise, with annual growth in the range of three to six percent, depending on the location. Many of the new homes are being built in the midst of previously-undeveloped forest land. When homes are built in the forest, construction damage occurs and ecosystems are dramatically altered. These factors, coupled with the higher risk of person-caused fire starts, have amplified the conditions which threaten Arizona's forest resources.

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<sup>2</sup> Non-indigenous species have been implicated in the decline of 42% of 958 U.S. species federally listed as threatened or endangered. For 18% of listed species, exotics represent the major factor leading to their endangerment. **America's Least Wanted**, The Nature Conservancy.

<sup>3</sup> Ecosystem health is critically dependent upon healthy and diverse vegetative communities. As exotics invade, biodiversity declines and ecosystem integrity is diminished. **Partners Against Weeds** USDI Bureau of Land Management.

<sup>4</sup> Plants are generally considered to be noxious if they are exotics (non-native), and they negatively impact agriculture, navigation, fish, wildlife, or public health. **Noxious Weeds: A Disaster Looking For A Place To Happen In Arizona** University of Arizona Cooperative Extension # 196010.

Wildland fire poses an escalating threat to our forest land. Research indicates that, prior to European settlement, natural fire frequency was on three to ten year intervals in Southwestern ponderosa pine. This fire frequency prevented an excessive buildup of ground and ladder fuels, and thinned out the smaller trees. The resulting forest condition posed very little risk of so-called "stand-replacement fires" and large-scale beetle-induced mortality. It also helped to maintain lower levels of dwarf mistletoe infections.

With the advent of effective fire suppression efforts, stand conditions began to change. In the absence of frequent, cool ground fires, fuel loadings increased on the forest floor and stand densities increased dramatically. These conditions have become progressively worse, so that in our present-day forest, there is little chance of a fire remaining on the ground with low intensity. This poses an unacceptable threat, not only to our forest resources, but also to the homes and people that are now in the midst of the forest. Graphic examples of this occurred in the summer of 2002 on the Rodeo-Chediski Fire (White Mountains/Ft. Apache Reservation) and on the Aspen Fire (Santa Catalina Mountains/Coronado National Forest) in 2003.

## **PROGRAM EMPHASIS**

### **Issues, Objectives, Strategies & Benefits**

Issues, objectives, strategies and benefits have been developed by the Arizona Forest Stewardship Committee (AFSC) in a collaborative, consensus-building process with the State Forester, and are stratified into eight *Program Areas*: Ecosystem Health & Sustainability; Rural Socioeconomics; Wood Supply & Utilization; Soil and Water Quality; Wildlife, Fish, & Their Habitats; Rare, Threatened & Endangered Species; Environmental Education; and Recreation & Esthetics. Issues, objectives, strategies and benefits are listed below for each of these *Program Areas*.

#### **Ecosystem Health & Sustainability**

**Issues:** Detrimental grazing practices and wildfire suppression have created an overcrowded forest that is more susceptible to catastrophic loss from fire and forest pests. Poor management practices violate ecosystem integrity. Invasive species threaten native vegetation and ecosystem stability.

**Objectives:** Restore forest ecosystems to a more sustainable condition, where cool, surface fires burn at frequent intervals. Manage and protect in ways that are respectful of ecosystem integrity. Integrate invasive species prevention/mitigation into management activities.

**Strategies:** Assist landowners in the application of restoration treatments to increase ecosystem sustainability. Within the range of maintaining ecosystem integrity, encourage landowners to reduce forest densities to keep losses to fire and pests at endemic levels. Include specific mitigations for invasive species in management prescriptions and plans.

**Benefits:** More and more NIPF land will be transformed and maintained in a healthy and sustainable condition. Damage and mortality due to overcrowded forest conditions will be reduced. Public understanding and awareness of forest health and sustainability will be increased. The potential for invasive species to displace native plants will be reduced.



## **Rural Socioeconomics**

**Issues:** Rural economies are less diverse and, in turn, less stable than are urban economies. Rural economies are a way of life and an integral part of the “cultural fabric”. Forest-based economies are struggling for survival in the face of uncertainties in the wood supply. Viable markets for wood products have declined with the loss of industrial infrastructure.

**Objectives:** To help sustain forest-based rural economies with the forest products generated by sustainable management of NIPF. To increase public understanding of the costs/benefits associated with reductions in tree harvest. To provide leadership in rural development for sustainable economies.

**Strategies:** Increase FLEP / FSP accomplishments, bringing more acres of NIPF under management. Sponsor symposiums and forums. Produce and disseminate informational brochures. Network with rural economic development entities/efforts

such as the Four Corners & Southwest Sustainable Forests Partnerships, Industries Of the Future, and the USDA Rural Development Program.

**Benefits:** With increased community support, sustainable wood-based economic development will occur to complement sustainable forest management.

## **Wood Supply & Utilization**

**Issues:** Commercial wood supply is dwindling. Uncertainty of supply inhibits establishment of new industries. There is a need for more value-added, forest-based industry. Small-diameter wood requires better technologies and greater efficiency.

**Objectives:** To contribute to a sustainable wood supply through FLEP / FSP activities. To improve efficiency in the wood products industry. To diversify wood-based economies.

**Strategies:** Write and implement Forest Stewardship plans on NIPF lands, bringing new acres under management. Provide assistance in improving wood processing efficiency (i.e., fall-and-buck, sawmill improvement studies). Analyze and promote value-added wood-based industry through economic revitalization efforts.

**Benefits:** As more acres are brought under management, a sustainable flow of wood will become available to support rural wood-based economies. Increased efficiency in wood processing will improve the economic viability of forest enterprises.

## **Soil, Forage & Water Quality**

**Issues:** Inadequate ground cover and unacceptable ground disturbances are contributing to soil loss and water quality degradation. Management policies that violate Best Management Practices (BMP's) are contributing to soil erosion and a decrease in water quality.

**Objectives:** To improve ground cover and encourage the application of BMPs.

**Strategies:** Influence watershed conditions through FLEP / FSP planning and management. Plant trees for filter strips and streambank stabilization.

**Benefits:** Implementation of BMPs will improve watershed condition, resulting in less point- and non-point- source pollution. Ecosystems on NIPF will function at higher levels and become more productive.

## **Wildlife, Fish & Their Habitats**

**Issues:** Wildlife and fish habitat are being lost and/or degraded by human encroachment and through inappropriate management activities. Riparian areas are in need of restoration and protection. Habitat fragmentation is resulting from subdividing, sale and development. Sensitive species and RT&E need to be protected.

**Objectives:** To improve the sensitivity of NIPF management to wildlife and fish concerns. To better manage and protect riparian NIPF. To discourage and prevent habitat fragmentation. To proactively consider and mitigate RT&E concerns in NIPF management activities.

**Strategies:** Implement and maintain wildlife habitat BMP's through FLEP / FSP planning and implementation. Support and assist AGFD with the inventory and subsequent management of riparian NIPF. Protect and enhance riparian NIPF through pooled funding opportunities. Educate and refer NIPF owners to conservation easement programs such as Forest Legacy, Wetlands Reserve Program. Actively publicize and promote the protection of RT&E in balance with other forest resources through NIPF management efforts.

**Benefits:** NIPF owners will gain increased awareness of the threats to wildlife and RT&E habitat. Wildlife habitat will be enhanced and better protected from fragmentation as NIPF owners take advantage of conservation easement programs..

## **Rare, Threatened & Endangered Species**

**Issues:** Populations of certain flora and fauna and their habitats require special protection and management.

**Objectives:** Ensure full compliance with the Endangered Species Act by participating landowners. Where possible, assist in the compilation of baseline data on listed species.

**Strategies:** Fully inform landowners of rare, threatened & endangered species (RT&E) considerations for their property. Where appropriate, consult with the US Fish & Wildlife Service (fauna), the Arizona Game & Fish Department (fauna), the Arizona Department of Agriculture (flora), and others on behalf of landowners.

**Benefits:** Compliance with laws pertaining to RT&E is ensured. RT&E habitats and populations will be enhanced.

### **Environmental Education & Outreach**

**Issues:** Some landowners lack the expertise to independently manage their forest ecosystems wisely. Many landowners are not aware of the opportunities available through the FLEP, the FSP, and other programs..

**Objectives:** Bring new acres under management by assisting landowners through FLEP and FSP. Effectively disseminate information on FLEP, FSP and other conservation programs to eligible landowners.

**Strategies:** Develop and distribute promotional literature for FLEP, FSP and other conservation programs. Help sponsor workshops to educate landowners and others on ecosystem sustainability.

**Benefits:** NIPF owners will become better informed about ecosystem sustainability and the programs that can help them manage their forest land wisely.

### **Recreation & Esthetics**

**Issues:** As population increases, so does recreational activity and resultant impacts on NIPF. Public awareness, involvement and expectations in the area of esthetics are increasing.

**Objectives:** To increase and enhance recreational opportunities. To improve mitigation of esthetic concerns in forest management. To increase public understanding and acceptance of all aspects of ecosystem management.

**Strategies:** Increase consideration of recreation and esthetics in the management planning process. Utilize interpretive techniques to improve public understanding of forest health and sustainability.

**Benefits:** Enhancement of esthetics and dispersed recreational opportunities on NIPF. Public support for sustainable forest management is improved.

## **Program Priorities**

The State Forester has a set of four statewide priorities that span all eight program areas described in the previous section. Because personnel and funding are both limited, the State Forester feels that it is important to concentrate technical assistance efforts where they will bring the greatest return on investment. From highest to lowest, the priorities are:

1. Ownerships in the wildland/urban interface where forest ecosystem health and fire prevention are serious concerns of major importance. Forest types where the incidence of catastrophic fire is highest (e.g., ponderosa pine) will be a higher priority than those where it is less (e.g., pinyon-juniper). Preventive action (i.e., thinning & fuel treatment of live trees) will take precedence over suppressive action (i.e., removal of trees killed by fire, insects, or disease).
2. Other areas where the potential for damage by catastrophic events is high due to ecosystem condition, climatic factors, elevated threats from insects and disease, and wildfire risk.
3. Forest land where soil and water quality are seriously degraded or threatened by catastrophic events.
4. Coordination with and leveraging of other related program funding and services (e.g., Four Corners Sustainable Forests Partnership, USDA Forest Service Rural Development Program).

## **PROGRAM ELEMENTS**

In consultation with the Arizona Forest Stewardship Committee, the State Forester has decided that Arizona's FLEP will include the elements of technical assistance, financial assistance, and educational assistance. So structured, the FLEP will complement rather than replace or duplicate any existing federal and/or state programs, or programs offered through institutions of higher learning, which provide assistance to NIPF owners. Specifically, the FLEP will augment the technical assistance provided through the FSP, supplant the educational and training efforts of the FSP, and replace the financial assistance that was provided through the Forestry Incentives Program (FIP) and the Stewardship Incentives Program (SIP). Depending upon the total FLEP allocation to the State, it is anticipated that program funding will be apportioned as follows: Technical Assistance: 35%; Financial Assistance: 45%; Educational Assistance: 10%; and Administration: 10%. The anticipated first-year allocation of \$215,365 would result in \$75,378 going to technical assistance, \$96,915 to financial assistance, \$21,536 to educational assistance, and \$21,536 to program administration. The selection and funding of program elements will be reevaluated if program funding is modified or suspended.

### **Technical Assistance**

Technical assistance will be provided by Land Department Service Foresters through both the FSP and the FLEP. The rationale for putting 35% of the FLEP funding in technical assistance is that the combined FLEP / FSP technical assistance capability will be sufficient to ensure prudent and timely expenditure of FLEP financial assistance monies. FLEP technical assistance monies will fund additional Service Forester capability through agency hiring and/or contracting. Outreach efforts will target owners of NIPF in the wildland/urban interface, as well as owners of NIPF which is at immediate risk from fire, insects and disease. Renewed effort will be made to increase program awareness by tribal entities.

The most immediate short-term outcome of FLEP technical assistance will be the treatment of NIPF ownerships that are "in the hopper". Preliminary contacts/assists have identified several NIPF owners who are interested in bringing their property under management. Service Foresters should be able to get these properties signed up for financial assistance shortly after the money becomes available. In the long-term, FLEP will result in a significant increase in the total NIPF under management, translating into healthier, more sustainable forests. Measurable outcomes will include the number of landowners assisted, the number of new and revised Landowner Forest Stewardship Plans, and the number of acres covered by those plans.

Accomplishments in the FLEP will be documented in Landowner files, in annual accomplishment reports to the USDA Forest Service, and in the annual FLEP / FSP Activity Report. Additionally, cumulative accomplishments will be documented by July 15, 2006 in the Summary Report of all State activities and practices funded through FLEP as of June 1, 2006.

## **Financial Assistance**

The rationale for apportioning 45% of FLEP funding to financial assistance activities is to maximize on-the-ground accomplishment. The amounts distributed to the other program elements are apportioned based on what is needed to support a new cost-share program of this size.

Upon receipt of FLEP funding, the cost-share program will be administered by the Arizona State Land Department in a manner patterned after the Stewardship Incentive Program and the SIP/Forest Health Program (see **Arizona FLEP Cost-Share Program Guidelines–Appendix C**).

The following practices will be available to eligible landowners in Arizona. Very high priority practices will be cost-shared at 75%; high priority at 65%; medium priority at 55%; and low priority at 50%. Practices will be considered for approval by the Forest Stewardship Coordinator (FSC) in consultation with the AFSC. Applications will be approved in the order received within the constraints of program & practice priorities, with a cost-share limit of \$10,000 per applicant per federal fiscal year.

- FLEP– 1.....Management Plan Development** (Very High, 75%)
- FLEP– 2.....Afforestation & Reforestation (Not Offered–see footnote <sup>5</sup>)
- FLEP– 3.....Forest Stand Improvement (Not Offered–see footnote <sup>6</sup>)
- FLEP– 4.....Agroforestry Implementation (Not Offered)
- FLEP– 5.....Water Quality Improvement & Watershed Protection** (Medium, 55%)
- FLEP– 6.....Fish & Wildlife Habitat Improvement** (Low, 50%)
- FLEP– 7.....Forest Health Practices** (High, 65%)
- FLEP– 8.....Invasive Species Control** (Low, 50%)
- FLEP– 9.....Wildfire & Catastrophic Risk Reduction** (High, 65%)
- FLEP–10.....Wildfire & Catastrophic Event Rehabilitation** (Medium, 55%)
- FLEP–11.....Special Practices (Not Offered)

Measurable outcomes of the financial assistance element will include the practices & components, expressed in the specified units, that are shown in **AZ FLEP-Exhibit C-Practices and Components**.

Accomplishment reporting will be done in the same manner for financial assistance activities as is described above under technical assistance.

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<sup>5</sup> Tree planting will be offered under FLEP-10.

<sup>6</sup> The intent of this practice can be met through FLEP-7.

## **Educational Assistance**

The amount of FLEP funding designated for educational assistance is based on the anticipated need for a new cost-share program of the aforementioned size.

Educational assistance activities include the development, printing and dissemination of printed materials for program outreach; construction and maintenance of a FLEP/FSP website; implementation of the landowner recognition program; and the development and presentation of training sessions. The primary participating entities in educational assistance will be the Arizona State Land Department and the University of Arizona Cooperative State Research Extension and Education Service (CSREES), although other members of the Arizona Forest Stewardship Committee may participate as well.

Expected outcomes include greater public awareness of FLEP / FSP program opportunities, better access to FLEP / FSP by NIPF owners, more “pride of ownership” by program participants, and smoother program delivery by well-trained personnel. Measurable outcomes will include number of information assists; number of landowners recognized; number of meetings, seminars, and training sessions held with total participant hours; informational literature developed/distributed; and website development.

Accomplishment reporting will be done in the same manner for educational assistance activities as is described above under technical assistance.

## **PUBLIC PARTICIPATION & ARIZONA'S STEWARDSHIP COMMITTEE**

Much of the impetus for development of the FLEP and FSP has been vested in the State Foresters. Greater authority and flexibility have been built in at the state level, resulting in programs that are custom-fit to the unique challenges and opportunities found within each state. This "custom fit" has been developed with public participation through the Arizona Forest Stewardship Committee,

### **Enabling Legislation and Intent**

Section 19 (b) of the Cooperative Forestry Assistance Act of 1978 as amended by the Forestry Title of the 1990 Farm Bill (S. 2830, Title XII, Subtitle A) required the establishment of a State Stewardship Coordinating Committee (The Arizona Forest Stewardship Committee: AFSC), to be chaired by the State Forester or designee thereof. The AFSC is chaired by Arizona's Forest Stewardship Coordinator: FSC (See the **AFSC Roster–Appendix C**). Coordination with the Stewardship Committee in the FLEP was mandated in Title VIII of the Farm Security and Rural Investment Act of 2002 (Public Law 107-171). The Stewardship Committee is to function in a supporting and advisory capacity, providing assistance and recommendations to the State Forester regarding the development, implementation, monitoring, and updating of the FLEP State Priority Plan and the State Forest Stewardship Plan.

Diversity of membership on the Arizona Forest Stewardship Committee (AFSC) provides benefits in four distinct areas:

1. Public Participation / Program Diversity: Representation and blending of diverse perspectives on the Committee provides the opportunity for participation by a diverse public, and results in broader-based and better-developed programs.
2. Networking: Lines of communication have produced better information-sharing and a more effective framework for outreach to various audiences.
3. Technical Assistance: A better delivery system is in place, with diverse disciplinary expertise available.
4. Clearinghouse: The AFSC links program participants to a variety of educational, technical and financial incentive programs.



## **Membership**

In concert with enabling legislation, the National Standards and Guidelines for the Forest Stewardship Program specify that the committee must include representation of the following entities:

- a. Representatives from the US Department of Agriculture, including the Forest Service, the Natural Resource Conservation Service, the Farm Service Agency, and the Cooperative Extension Service;
- b. Representatives of:
  - 1. local government
  - 2. soil and water conservation districts
  - 3. consulting foresters
  - 4. environmental organizations
  - 5. forest products industry
  - 6. forest land owners
  - 7. land-trust organizations
  - 8. conservation organizations
  - 9. the State fish and wildlife agency
  - 10. any other appropriate interests

Arizona's Forest Stewardship Committee includes a full complement of the required partners that are listed above (See **AFSC Roster–Appendix C**). Interagency cooperation is key to successful delivery of the FLEP and the FSP. Several agencies have roles which go beyond their representation on the Arizona Forest Stewardship Committee.

## **Arizona State Land Department (ASLD)**

The State Land Commissioner is also the State Forester. As such, he is identified as the responsible entity, in consultation with the AFSC, for development and delivery of the FLEP and Stewardship programs. The Land Department, through its Forest Stewardship Coordinator, District Foresters and Service Foresters, provides leadership, coordination, oversight, and technical assistance. The Forest Stewardship Coordinator serves as the State Forester's representative in chairing the AFSC. The District Foresters and Service Foresters have delegated authority for managing the Forest Land Enhancement Program (FLEP) and the Stewardship Incentive Program (SIP) at the county level and also serve as technical advisors for a number of SIP practices.

## **Arizona Game and Fish Department (AGFD)**

The Game and Fish Department is a key contributor in several ways. Their representative is a member of the AFSC as well as the Technical Oversight Subcommittee, and provides valuable insight and assistance in program oversight and delivery. AGFD also contributes at the field level, where habitat and wildlife program specialists serve as technical advisors for FLEP and SIP practices.

## **USDA Forest Service (USFS)**

The Forest Service is the federal agency through which the Stewardship programs are funded and administered. Rules and regulations are developed at the national level, and grant administration as well as program oversight are provided at both the national and regional levels, including on-site program reviews. Approval of the FLEP / FSP State Priority Plan by the Regional Forester is a program requirement. A representative of the Regional Forester of the Southwestern Region–Region 3 sits on the AFSC.

## **USDA Natural Resource Conservation Service (NRCS)**

The NRCS is an important cooperator in the FLEP and Stewardship programs. They provide a representative who is actively involved with both the AFSC and the Technical Oversight Subcommittee. In addition, District Conservationists and Technicians serve as technical advisors for several FLEP and SIP practices. NRCS also provides an important link to other USDA financial incentive programs, such as the Environmental Quality Improvement Program (EQIP), the Wildlife Habitat Improvement Program (WHIP), and others.

## **USDA Farm Service Agency (FSA)**

The role of the Farm Service Agency has been broad in scope. During the early years of the Stewardship Incentive Program, they worked closely with the USFS in the development and administration of SIP. Commonly referred to as "the banker and record keeper" of the SIP, the FSA has served as a vehicle for funding and processing of SIP cost-share from the national level on down to the state and county levels. Their County Executive Directors and staff have been key to the success of SIP as they accepted and processed applications, and initiated payment for approved practices. In this role, they have worked closely with the Service Foresters of ASLD. In Arizona's Forest Land Enhancement Program, the FSA does not serve as banker and bookkeeper. However, they continue to be an active participant on the AFSC as well as the Technical Oversight Subcommittee.

## **Cooperative State Research Extension & Education Service (CSREES)**

The CSREES, which is affiliated with the University of Arizona, has a representative on both the AFSC and the Outreach Subcommittee. The primary contribution of CSREES is to provide assistance in the arena of public information and education, including such things as creating and distributing informational literature, creating and maintaining a Stewardship program webpage, coordinating a landowner recognition program, providing for media coverage, and organizing field days for educational purposes. One of the tools to be used in this effort is Project Learning Tree, a forestry-based K-12 curriculum for environmental education. Educational assistance will be an important element of the FLEP in Arizona, and the CSREES will play a vital role in public awareness strategies.

## **Subcommittees**

Specific aspects of the Stewardship Program are addressed by subcommittees, with their actions and recommendations subject to approval by the Arizona Forest Stewardship Committee and the State Forester. Current subcommittees include Technical Oversight and Outreach (Public Affairs). Additional subcommittees may be formed as needed.

### **Technical Oversight Subcommittee**

The Technical Oversight Subcommittee is primarily concerned with the design, implementation, oversight, and monitoring of the Forest Stewardship and Stewardship Incentive Programs. This includes making recommendations to the Forest Stewardship Committee on program priorities, approved components, cost-share rates, program monitoring, and appeals that are not resolved at the subcommittee level. Another important duty of this subcommittee is to assist in drafting revisions of the State Forest Stewardship Plan for review and subsequent action by the State Committee.

### **Outreach Subcommittee**

The Outreach Subcommittee is responsible for the development and implementation of a public affairs program. The lead entities in outreach efforts will be the Arizona State Land Department and the University of Arizona Cooperative State Research Extension and Education Service (CSREES), with participation by other members of the AFSC as well. Creating and distributing informational literature, creating and maintaining a Stewardship program webpage, coordinating a landowner recognition program, providing for media coverage, and organizing field days for educational purposes are among the duties of this subcommittee. This subcommittee also provides assistance to the Technical Oversight Subcommittee and to the AFSC in the development, publicizing, and presentation of program training activities.

## **PROGRAM MONITORING AND EVALUATION**

Program monitoring and evaluation will occur for both the Forest Land Enhancement and Forest Stewardship Programs.

Techniques that will be applied include:

1. Service Foresters' recertification of Forest Stewards.  
This must be an on-site inspection at least once/5-year period.
2. Annual field trips by the AFSC to observe and assess the effectiveness of program delivery. These visits will also serve as compliance checks.
3. On an annual basis, the Technical Oversight Subcommittee will prepare a FLEP / FSP Activity Report for presentation to the Arizona Forest Stewardship Committee, which will then be submitted to the Responsible Official in the USDA Forest Service. This report will provide a basis for assessment of program activity and possible revision of program priorities and content.

## **RECOGNITION PROGRAM**

Landowners who have begun the application of at least one recommendation from their approved Landowner Forest Stewardship Plan will be eligible for recognition. They will receive a certificate of membership in the Arizona Forest Stewardship Program as well as a sign to post at their Stewardship Forest. Local media coverage of the presentation of the certificate and sign is encouraged. Primary coordination of the recognition program will be shared by the ASLD and the CSREES.

## **TRAINING**

The Arizona Forest Stewardship Committee (AFSC) will sponsor an annual training session for those involved in the delivery of the FLEP and FSP, including Service Foresters, technical advisors from the USDA Natural Resource Conservation Service and the Arizona Game & Fish Department, and Stewardship consultants. These sessions, with lead coordination by the ASLD and CSREES, will provide a forum for troubleshooting and improving the delivery of the programs. This training will coincide with the winter meeting of the AFSC, and will be open to interested members of the AFSC as well.

**MEMBERSHIP ROSTER OF  
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